

## BOOK REVIEWS

DOUGLAS D. STOKKE and LESLIE H. GROOM (ed.). 2006. **Characterization of the Cellulosic Cell Wall**. (ISBN 0-8138-0439-6, 978-0-8138-0439-2, hbk.). Blackwell Publishing, 2121 State Ave., Ames, IA 50014-8300, U.S.A. and 9600 Garsington Road, Oxford, OX4 2DQ, UK. (**Orders:** orders@ames.blackwellpublishing.com, 515-292-0140, 515-292-3348 fax 1-800-862-6657, www.blackwellprofessional.com). \$149.99, 274 pp., color photos, numerous b/w illustrations, 7" × 10".

"Crack" as the twig breaks, the slightly elastic wood suddenly yielding ... but so much more. This collection of studies, fundamental and applied science, represents the proceedings of a workshop cosponsored by the USDA Forest Service, the Society of Wood Science and Technology, and Iowa State University—"the result of collaboration between three institutions with a long history of research and scientific communication regarding lignocellulosic substances, primarily wood." The book is "intended for scientists, university faculty, graduate students, and applied researchers in the fields of wood science and technology, cellulose science, and biomaterials." The book is arranged in three sections:

*Cell Wall Assembly and Function: New Frontiers* (5 chapters, e.g.: tracheid and sclereid differentiation in callus cultures of *Pinus radiata*; mechanics of the wood cell wall; prediction of wood structural patterns by using ecological models of plants water relations)

*Probing Cell Wall Structure: Advances in Analysis* (6 chapters, e.g.: determining xylem cell wall properties by using model plant species; near infrared spectroscopic monitoring of the diffusion process of deuterium-labeled molecules in wood; wood stiffness by X-ray diffractometry)

*Mesostructure and Applications: Science in Practice* (8 chapters, e.g.: variation in kink and curl of longleaf pine fibers; wood structure and adhesive bond strength).

—Guy Nesom, Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, TX 76102-4068, U.S.A.

MARTHA J. GROOM, GARY K. MEFFE, and C. RONALD CARROLL. 2005. **Principles of Conservation Biology, Third Edition**. (ISBN 0-87893-518-5, hbk.). Sinauer Associates, Inc., 23 Plumtree Road, Sunderland, MA 01375-0407; U.S.A. (**Orders:** orders@sinauer.com, www.sinauer.com, 413-549-4300, 413-549-1118 fax). \$92.95, 699 pp., 369 illustrations, 8 1/2" × 11".

This is a major update and revision of the 1997 Second Edition, with much new information and guided by a survey of "over 60 instructors on their needs for teaching conservation biology." The text is divided into three major units: *Conceptual Foundations for Conservation Biology* (5 chapters); *Focus on Primary Threats to Biodiversity* (6 chapters); *Approaches to Solving Conservation Problems* (7 chapters). A "companion website contains a variety of study materials and supplemental resources to accompany the textbook." On the first page of Chapter 1: "the cumulative impacts of 6.4 billion people (Figure 1.1) have stressed the many ecological support systems of the planet. ... All people should recognize the degree to which human impacts affect the natural world, and in turn, diminish our abilities to prosper." All biologists who think about conservation should have this book at hand (or one like it, if there's another so good).—Guy Nesom, Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, TX 76102-4068, U.S.A.